



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2021-0667; Project Identifier MCAI-2021-00580-T; Amendment 39-21931; AD 2022-03-14]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus SAS Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Airbus SAS Model A350-941 and -1041 airplanes. This AD was prompted by a report that during type certification activity, it was identified that certain monitoring software was incorrectly implemented in the braking control system (BCS) certification standard. This AD requires installing (updating) certain software for the braking and steering system, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For material incorporated by reference (IBR) in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email

ADs@easa.europa.eu; Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0667.

### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0667; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Dan Rodina, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3225; email [dan.rodina@faa.gov](mailto:dan.rodina@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Background**

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0127, dated May 12, 2021 (EASA AD 2021-0127) (also referred to as the MCAI), to correct an unsafe condition for certain Airbus SAS Model A350-941 and -1041 airplanes.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus SAS Model A350-941 and -1041 airplanes. The NPRM published in the *Federal Register* on August 18, 2021 (86 FR

46164). The NPRM was prompted by a report that during type certification activity, it was identified that certain monitoring software was incorrectly implemented in the BCS certification standard. The NPRM proposed to require installing (updating) certain software for the braking and steering system, as specified in EASA AD 2021-0127.

The FAA is issuing this AD to address in-service limitations related to the braking and steering system, which, under specific degraded conditions, could lead to a reduction in braking performance and potentially lead to a runway excursion, and result in damage to the airplane and injury to passengers. See the MCAI for additional background information.

### **Discussion of Final Airworthiness Directive**

#### **Comments**

The FAA received comments from Delta Airlines (DAL) and the Air Line Pilots Association, International (ALPA). ALPA supported the NPRM without change. The following presents the DAL comments received on the NPRM and the FAA's response to each comment.

#### **Request to Revise the Costs of Compliance Paragraph**

DAL requested that the NPRM include the labor hours associated with the prerequisite service bulletins referenced in Airbus Service Bulletin A350-32-P037, dated July 30, 2019 (which is referenced in EASA AD 2021-0127). DAL stated that, depending on airplane configuration, the actions in the four prerequisite service bulletins may need to be done before doing the actions specified in referenced Airbus Service Bulletin A350-32-P037, dated July 30, 2019.

The FAA acknowledges the commenter's request. If an operator accomplishes prerequisite service information specified in Airbus Service Bulletin A350-32-P037, dated July 30, 2019 (which is referenced in EASA AD 2021-0127) there is an additional cost to those prerequisite service information. It is estimated that an operator may incur

an additional 15 work-hours and up to an additional \$1,275 in parts cost to accomplish the prerequisite service information. However, since accomplishment of the prerequisite service information may not be required to accomplish the required actions of this AD, these costs may not apply to all operators. The FAA has added this explanation to the Cost of Compliance paragraph in this AD, but not the additional costs for accomplishing the prerequisite service information.

#### **Request to Add a Certain AD to Paragraph (b) of the Proposed AD**

DAL requested that the FAA add AD 2017-18-18, Amendment 39-19027 (82 FR 42579, September 11, 2017) (AD 2017-18-18) to paragraph (b) of the proposed AD (AD 2017-18-18 requires repetitive on-ground power cycles to reset the internal timer). DAL stated that Airbus Service Bulletin A350-42-P010, dated August 14, 2018, is a required prerequisite for doing the actions in Airbus Service Bulletin A350-32-P037, dated July 30, 2019 (which is referenced in EASA AD 2021-0127), and therefore, is a requirement for doing the actions in the proposed AD. DAL commented that Airbus Service Bulletin A350-42-P010, dated August 14, 2018, was approved for use in alternative method of compliance (AMOC) AIR-676-19-298, dated July 22, 2019, for accomplishing the requirements in paragraph (g) of AD 2017-18-18.

The FAA disagrees with the request. Paragraph (b) of this AD identifies superseded or revised ADs, or other ADs if the requirements of those ADs are affected (i.e., this AD terminates all or part of another AD). AD 2017-18-18 does not meet any of those conditions, and therefore, is not considered an affected AD. The FAA has not changed this AD in this regard.

#### **Request to Revise the Applicability**

DAL requested that the FAA revise the applicability of the proposed AD. DAL stated that the applicability should be limited to Model A350-941 and -1041 airplanes having manufacturer serial numbers listed in the applicability paragraph of Airbus

Service Bulletin A350-32-P037, dated July 30, 2019 (which is referenced in EASA AD 2021-0127). DAL commented that the applicability needs focus on the finite list of manufacturer serial numbers that were not produced with the required modification. DAL also commented that the applicability paragraph specified in EASA AD 2021-0127 has an exception for airplanes that have embodied Airbus modification 114420 in production. DAL stated that this logic requires the operator to actively verify that the actions in EASA AD 2021-0127 have been accomplished on every new airplane in production.

The FAA disagrees with revising the applicability of this AD. The applicability of this AD was coordinated with EASA and determined to be necessary to address those airplanes affected by the unsafe condition. In addition, the applicability of an AD takes precedence over the effectivity listed in any service bulletin. Excluding airplanes in the applicability ensures that operators make a definitive determination of whether an airplane is affected. Once an airplane has been delivered to an operator, it is the operator's responsibility to ensure compliance with the AD actions. The FAA has not changed this AD in this regard.

#### **Request to Add an Exception to the Proposed AD**

DAL requested that the FAA add an exception to paragraph (h) of the proposed AD to specify that the required for compliance (RC) language in paragraph (i)(3) of the proposed AD applies to paragraphs 3.C. and 3.E. of the Accomplishment Instructions of Airbus Service Bulletin A350-32-P037, dated July 30, 2019 (which is referenced in EASA AD 2021-0127). DAL stated that testing the airplane to verify if the correct software is installed as specified in paragraph 3.E. of the Accomplishment Instructions of Airbus Service Bulletin A350-32-P037, dated July 30, 2019, meets the intended level of safety in the proposed AD.

DAL also requested that paragraphs 3.A., 3.B., 3.D., 3.F., and 3.G of the Accomplishment Instructions of Airbus Service Bulletin A350-32-P037, dated July 30,

2019, not be included as RC. DAL stated that these paragraphs are not required to establish the intended level of safety in the proposed AD. DAL commented that no paragraphs in the service bulletin were identified as RC.

The FAA agrees to add an exception to paragraph (h)(3) of this AD for the reasons provided above. The FAA has revised paragraph (h) of this AD to specify that only paragraphs 3.C. and 3.E. of the Accomplishment Instructions of Airbus Service Bulletin A350-32-P037, dated July 30, 2019, must be accomplished if Airbus Service Bulletin A350-32-P037, dated July 30, 2019, is used for the modification required by EASA AD 2021-0127.

### **Conclusion**

The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting this AD as proposed. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products.

### **Related Service Information Under 1 CFR Part 51**

EASA AD 2021-0127 describes procedures for installing (updating) serviceable software for the braking and steering system. Serviceable software includes BCS software (SW) standard (STD) S5B, wheel steering control system (WSCS) SW STD S5B, and landing gear extension and retraction system (LGERS) SW STD S5A. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Costs of Compliance**

The FAA estimates that this AD affects 17 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

### **Estimated costs for required actions\***

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Up to 4 work-hours X \$85 per hour = Up to \$340	Up to \$1,650	Up to \$1,990	Up to \$33,830

\*If an operator accomplishes prerequisite service information specified in Airbus Service Bulletin A350-32-P037, dated July 30, 2019 (which is referenced in EASA AD 2021-0127) there is an additional cost to those prerequisite service information.

According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators. The FAA does not control warranty coverage for affected operators. As a result, the FAA has included all known costs in the cost estimate.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the

national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a

substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2022-03-14 Airbus SAS:** Amendment 39-21931; Docket No. FAA-2021-0667; Project Identifier MCAI-2021-00580-T.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.



**(c) Applicability**

This AD applies to Airbus SAS Model A350-941 and -1041 airplanes, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2021-0127, dated May 12, 2021 (EASA AD 2021-0127).

**(d) Subject**

Air Transport Association (ATA) of America Code 32, Landing gear.

**(e) Reason**

This AD was prompted by a report that during type certification activity, it was identified that certain monitoring software was incorrectly implemented in the braking control system (BCS) certification standard. The FAA is issuing this AD to address in-service limitations related to the braking and steering system, which, under specific degraded conditions, could lead to a reduction in braking performance and potentially lead to a runway excursion, and result in damage to the airplane and injury to passengers.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Requirements**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2021-0127.

**(h) Exceptions to EASA AD 2021-0127**

(1) Where EASA AD 2021-0127 refers to its effective date, this AD requires using the effective date of this AD.

(2) The “Remarks” section of EASA AD 2021-0127 does not apply to this AD.

(3) Where EASA AD 2021-0127 requires modifying the airplanes and specifies the modification “can be accomplished in accordance with the instructions of the SB,” for this AD, replace the text “the instructions of the SB” with “paragraphs 3.C. and 3.E. of the Accomplishment Instructions of the SB.”

**(i) Additional AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Large Aircraft Section, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: Except as required by paragraph (i)(2) of this AD, if any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(j) Related Information**

For more information about this AD, contact Dan Rodina, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3225; email [dan.rodina@faa.gov](mailto:dan.rodina@faa.gov).

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2021-0127, dated May 12, 2021.

(ii) [Reserved]

(3) For EASA AD 2021-0127, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on January 25, 2022.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

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